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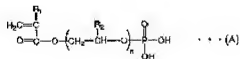
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## (54) PHOSPHATE GROUP-CONTAINING POLYMER AND POLYMERIC SOLID ELECTROLYTE CONTAINING THE SAME

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a phosphate group-containing polymer material exhibiting high proton conductivity in a wide temperature range and a wide humidity range, and having such a heat-resisting property as to not exhibit any troubles when practically used, and to provide a polymeric solid electrolyte by using the same polymer.

SOLUTION: This phosphate group-containing polymer is obtained by polymerizing an (meth)acrylic acid ester which contains an acidic phosphate group at a side chain terminal and is expressed by general formula (A) (R1 is H or CH3; R2 is H, CH3 or CH2Cl; n is a positive integer of 1-6) as a main component. The polymeric solid



(ただし、式(A)において、R<sub>1</sub>はH又はCH<sub>3</sub>であり、R<sub>2</sub>はH、CH<sub>3</sub>又はCH<sub>2</sub>Clであり、nは1-6の正の整数である。)

electrolyte which is obtained by casting the phosphate group-containing polymer to form the film exhibits high proton conductivity in a wide temperature range and a wide humidity range.